

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 H05K1/02 H05K7/20

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 H05K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ, IBM-TDB, INSPEC, COMPENDEX

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5 459 639 A (IZUMI SHIGEICHI) 17 October 1995 (1995-10-17) column 4, line 30 – column 5, line 59; figure 2	1-4,7,8, 10-14,16
X	US 4 509 096 A (BALDWIN GRAHAM J ET AL) 2 April 1985 (1985-04-02) column 3, line 13 – column 5, line 2; figures 1,3	1-4,7,8, 10-14,16
X	US 6 078 101 A (AIZENBERG EDUARD VOLFOVICH ET AL) 20 June 2000 (2000-06-20) column 2, line 65 – column 3, line 23; figure 1	1,2,7,8, 10,16

Further documents are listed in the continuation of box C.

Patent family members are listed in annex.

° Special categories of cited documents :

- "A" document defining the general state of the art which is not considered to be of particular relevance
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- "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
- "&" document member of the same patent family

Date of the actual completion of the international search

13 October 2004

Date of mailing of the International search report

25/10/2004

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 6 188 579 B1 (BUONDELMONTE CHARLES JOSEPH ET AL) 13 February 2001 (2001-02-13) column 1, line 64 - column 2, line 46; figure 1	1,2,7,8, 10,16

INTERNATIONAL SEARCH REPORTInternational Application No
PCT/US2004/014209

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US 4509096	A	02-04-1985	FR GB	2541511 A1 2135525 A ,B		24-08-1984 30-08-1984
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US 6188579	B1	13-02-2001	NONE			